

There are many dangers associated with the **incorrect handling and storage of hazardous materials** in the workplace. The incorrect storage of flammable materials has been identified as a **major cause of fires within the commercial and industrial sectors**. In South Africa the **Fire Safety Cabinets Standard SANS54470-1:2017** was introduced by the **South African Bureau of Standards (SABS)** in 2017 to address this problem.



## 1 SAFE CHEMICAL STORAGE

### FLAMMABLES CABINETS

Fire Safety Storage Cabinets, classified as Type 90 according to both the EN14470-1 and SANS54470-1 standard, offer maximum safety. It takes more than 90 minutes of exposure to a fire before the temperature inside rises to dangerous levels that could cause ignition of flammables, ensuring maximum protection for people and property.

### VENTILATION

Vapours of flammable solvents can be explosive if they come into contact with an ignition source. Ventilation systems reduce explosive atmospheres by capturing vapours and gases from stored solvents.

### ACIDS AND ALKALIS CABINETS

Storage cabinets for acids and alkalis offer optimal safety for the storage of non-flammable, aggressive hazardous materials. These cabinets are constructed with two hermetically divided storage compartments to ensure incompatible acid- and alkali-materials can be safely stored in the same cabinet.

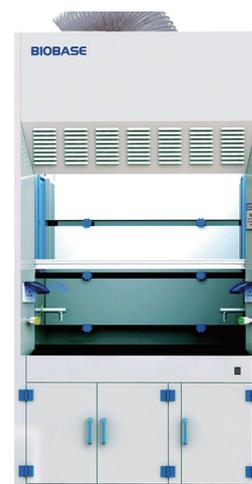
### CHEMICALS CABINETS

Robust and durable chemicals cabinets for the storage of aggressive and non-flammable hazardous materials. Clear markings and lockable doors ensure only authorised users have access to the stored hazardous materials.

## 2 USER PROTECTION AGAINST CHEMICAL VAPOURS

### FUME HOODS:

Reliable fume hoods from Lasec® protect the laboratory environment and operator during general chemical applications, actively shielding the operator from inhaling toxic vapours and dramatically reducing the risk of fire and explosion. The range includes fume hoods manufactured from polypropylene or powder coated cold rolled steel, with customisable work surface options to meet specific chemical application requirements. Each fume hood is supplied with a built-in centrifugal blower and has the option to be connected to a water and a gas supply.



## 3 CERTIFIED ATEX EQUIPMENT FOR USE IN EXPLOSIVE ENVIRONMENTS



### VACUUM PUMPS

VACUUBRAND offers Category 2 chemistry diaphragm pumps and vacuum systems in conformity with ATEX for use in zones where an explosive atmosphere is likely. These chemistry diaphragm pumps are appropriate for such locations because they are highly resistant to chemicals, oil-free, have no sliding surfaces, and the expansion chamber is hermetically sealed from the drive zone. ATEX chemistry vacuum systems with solvent recovery provide safe, convenient vacuum while protecting the environment.



### BALANCES AND SCALES

The new line of ATEX certified industrial scales from Radwag are designed in full compliance with the 1999/92/EC directive for use in high explosion risk environments, eliminating the risk of fire or explosion due to electric arc, sparks or high temperatures. Load Cells manufactured from AISI304 Stainless Steel and fitted with intrinsically safe power supplies, together with high ingress protection (IP66 and IP68), make these ideal for use in challenging industrial conditions where gases, vapours, mists and/or dust may result in potentially explosive atmospheres.



### FRIDGES AND FREEZERS

GRAM BIOLINE refrigerators and freezers are specially designed for operation in areas where the potential of an explosive atmosphere is high, and are compliant to the EN/IEC 60079-15 standard, which covers electrical apparatus for use in Category 3, Zone 2 locations. These units boast full ATEX compliance both inside and outside the storage container, with features such as spark proof plugs and optimised cabinet air circulation to ensure supreme temperature stability and, ultimately, a safer biostorage solution.